



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

April 21, 2017

Diana Williams  
Winfield Solutions, LLC  
P.O. Box 64589  
St. Paul, MN 55164-0589

Subject: Notification per PRN 98-10 – Warranty Statement and Other Minor Changes  
Product Name: LAMBDA-CY AG  
EPA Registration Number: 83222-42  
Application Date: 3/30/2017  
Decision Number: 528007

Dear Ms. Williams:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If you have any questions, you may contact Angela Hollis at 703 347-0216 or by email at [hollis.angela@epa.gov](mailto:hollis.angela@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kable Bo Davis", enclosed in a hand-drawn oval.

Kable Bo Davis, Product Manager 3  
Invertebrate and Vertebrate Branch 1  
Registration Division (7505P)  
Office of Pesticide Programs

# RESTRICTED USE PESTICIDE

Due to Toxicity to Fish and Aquatic Organisms

For retail sale to and use only to Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

**GROUP 3A INSECTICIDE**

## LAMBDA-CY AG

*For the Control of a Variety of Insect Pests on Selected Crops  
Contains the same active ingredient as Karate® Insecticide.*

Active Ingredient:  
Lambda-cyhalothrin..... 11.4%  
Other Ingredients:..... 88.6%  
Total 100.0%  
Contains petroleum distillates.  
Contains 1 lb. of active ingredient per gallon.

### NOTIFICATION

83222-42

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

04/21/2017

KEEP OUT OF REACH OF CHILDREN

## WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Do not give any liquid to the person.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies call <del>ProSAR 24 hours a day at 1-877-250-9291</del> . Contact 1-877-424-7452 for emergency medical treatment information.	
<b>Note to Physician</b> – Contains petroleum distillate – vomiting may cause aspiration pneumonia.	

For additional First Aid, precautionary, handling, and use statements, see inside of the booklet.

**SEE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS, COMPLETE DIRECTIONS FOR USE, WARRANTY DISCLAIMER AND LIMITATION OF LIABILITY.**

EPA Reg. No. 83222-42

EPA Est. No. XXXXX-XX-XXX

Manufactured For By:

~~Direct AG Source, LLC~~ Winfield Solutions, LLC

~~30473 260<sup>th</sup> St~~ P.O. Box 64589

~~Eldora, IA 50627~~ St. Paul, MN 55164-0589

Net Contents: \_\_\_\_\_ Gallons

1/0912/6

# WINFIELD

**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic Animals**

**WARNING-AVISO**

**WARNING-AVISO:** May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

**Personal Protective Equipment (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistant category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate or viton  $\geq 14$  mils
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROLS STATEMENT**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**User Safety Recommendations**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**Environmental Hazards**

This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind and rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

### Physical and Chemical Hazards

Combustible liquid. Do not use or store near heat or open flame. Do not use this product in or on electrical equipment due to the possibility of shock hazard.

### DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

This labeling must be in the possession of the user at the time of application.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate or viton  $\geq 14$  mils
- Shoes plus socks

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.**

### SPRAY DRIFT PRECAUTIONS

#### BUFFER ZONES

##### Vegetative Buffer Strip

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries; and commercial fish farm ponds).

Only apply products containing lambda-cyhalothrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers:

- Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21 pp. <http://www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf>.

**Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast)**

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

**Buffer Zone for ULV Aerial Application**

Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

**Buffer Zone for Non-ULV Aerial Application**

Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

**SPRAY DRIFT REQUIREMENTS****Wind Direction and Speed**

Only apply this product if the wind direction favors on-target deposition.

Do not apply when wind velocity exceeds 15 mph.

**Temperature Inversions**

Do not make aerial or ground applications into temperature inversions.

Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

**Droplet size**

Use only medium or coarse spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In condition of low humidity and high temperature, applicators should use a coarser droplet size.

**Additional Requirements for Ground Application**

For ground applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

**Additional Requirements for Aerial Application**

The spray boom should be mounted on the aircraft so as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

In the state of New York, a 25 ft. vegetated, non-cropped buffer strip untraversed by drainage tiles must be maintained between a treated field and a coastal salt marsh or stream that drains into a coastal salt marsh, for both aerial and ground application. For aerial applications, the 25 ft. vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 ft. buffer strip (or 450 ft. buffer strip for ULV application) required for spray drift.

## **CHEMIGATION**

### **Sprinkler Irrigation Application**

Apply Lambda-Cy AG at rates and timing described elsewhere in this label.

As local recommendations differ, consult your local State Extension Service or other local experts for recommendations on adjuvant or diluent types (see TANK MIX APPLICATION) rates and mixing instructions. These recommendations should be proven, through university and extension field trials, to be effective with Lambda-Cy AG applied by chemigation.

Check the irrigation system to insure uniform application of water to all areas. Thorough coverage of foliage is required for good control. Good agitation in the pesticide supply tank should be maintained prior to and during the entire application period.

Apply by injecting the specified rate of Lambda-Cy AG into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target area in 0.1-0.2 acre-inch of water. In general, use the least amount of water required for proper distribution and coverage. It is recommended that the product be injected into the main irrigation line ahead of a right angle turn in the line to insure adequate dispersion or mixing in the irrigation water. Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system.

In addition to the above recommendations, if application is being made during a normal irrigation set of a stationary sprinkler, the specified rate of Lambda-Cy AG for the area covered should be injected into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

It is not recommended that Lambda-Cy AG be applied through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year

### **Use Precautions - Sprinkler Irrigation Application**

A. Apply this product only through (sprinkler including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move) irrigation system(s). Do not apply this product through any other type of irrigation system.

B. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

C. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

D. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

E. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

F. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.

G. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

H. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

I. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

J. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

K. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

L. Any alternatives to the above required safety devices must conform to the list of EPA-approved alternative devices.

M. Do not apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of treated water.

N. Do not apply through chemigation systems connected to public water systems.

## PRODUCT INFORMATION

Initial and residual control is contingent upon thorough crop coverage. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air or 10 gallons per acre by ground unless otherwise specified in this label. When foliage is dense or pest pressure is high (heavier insect or egg pressure, larger larval stages), use of higher application volumes and/or higher use rates may improve initial and residual control.

For cutworm control, Lambda-Cy AG may be applied before, during or after planting. For soil incorporated applications, use higher rates for improved control.

### Resistance Management

Lambda-Cy AG contains a Group 3A insecticide. Insect/mite biotypes with acquired resistance to Group 3A may eventually dominate the insect/mite population if Group 3A insecticides/acaricides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Lambda-Cy AG or other Group 3A insecticides/acaricides

To delay insecticide resistance consider:

- Avoiding the consecutive use of Lambda-Cy AG or other group 3A insecticides/acaricides that have a similar target site of action, on the same insect/mite species.
- Using tank-mixtures or premixes with insecticides/acaricides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide/acaricide use on a comprehensive IPM program.
- Monitoring treated insect/mite populations for loss of field efficacy.

•Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide/acaricide resistance management and/or IPM recommendations for the specific site and resistant pest problems.

**Tank Mix Applications**

Lambda-Cy AG may be tank mixed with other currently registered pesticides unless expressly prohibited by the product label. Adjuvants such as spreader stickers, wetting agents, and penetrates may also be added. Use a small volume mixing test with the other products to confirm compatibility. If other chemicals are added to the applicator tank, Lambda-Cy AG should be added last. Fill tank to desired volume and continue to agitate while making applications. If mixed with EC formulations, use within 24 hours. Observe all restrictions and precautions found on labels of any products in the tank mix.

**SPECIFIC USE DIRECTIONS – AGRICULTURAL USES**

Crop	Target Pests	Rate		Remarks
		lb. a.i/A	fl. oz./A	
<b>ALAFABA AND ALFALFA GROWN FOR SEED</b>	Alfalfa Caterpillar Army cutworm Cutworm spp. Green Cloverworm Leafhopper species Looper spp. Threecornered Alfalfa Hopper Velvetbean Caterpillar Webworm spp.	0.015-0.025	1.92 – 3.20	Apply only to fields planted to pure stands of alfalfa. Apply as required by scouting. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air or 10 gallons per acre by ground.
	Alfalfa Seed Chalcid (Adult) Alfalfa Weevil Armyworm Bean Leaf Beetle (Adult) Blister Beetle spp. Blue Alfalfa Aphid Clover Leaf Weevil spp. Clover Root Borer (Adult) Clover Root Curculio spp. (Adult) Clover Stem Borer (Adult) Corn Earworm Cowpea Aphid Cowpea Curculio (Adult) Cowpea Weevil (Adult) Cucumber Beetle Spp. (Adult) Egyptian Alfalfa Weevil Fall Armyworm <sup>1</sup> Grape Colaspis (Adult) Grasshopper spp. Green June Beetle (Adult) Green Peach Aphid <sup>3</sup> Japanese Beetle (Adult)	0.02-0.03	2.56 – 3.84	When foliage is dense and/or pest populations are high 5-10 gallons per acre by air or 20 gallons per acre by ground and higher use rates are recommended. Use higher rates for increased residual control. Avoid application when bees are actively foraging by applying during the early morning or during the evening hours. Be aware of bee hazard resulting from a cool evening and/or morning dew. It may be advisable to remove bee shelters during and for 2-3 days following application. Avoid direct application to bee shelters. • Do not apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. oz. of product)/A per cutting. • Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season. • Do not apply within 1 day of harvest for forage or within 7 days of harvest for hay.  <sup>1</sup> Use higher rates for large larvae. <sup>2</sup> Suppression only.

	Meadow Spittlebug Mexican Bean Beetle Pea Aphid Pea Weevil (Adult) Plant Bug spp. Including Lygus spp. <sup>3</sup> Spotted Alfalfa Aphid Stink Bug spp. Sweet Clover Weevil (Adult) Thrips spp. <sup>4</sup> Western Yellow-striped Armyworm Whitefringed Beetle spp. (Adult) Yellow-striped Armyworm			<sup>3</sup> See resistance statement under <b>PRODUCT INFORMATION.</b> <sup>4</sup> Does not include Western Flower Thrips.
	Beet Armyworm <sup>1, 3</sup> Blotch Leafminer <sup>3</sup> Spider Mites <sup>1</sup>	0.03	3.84	
<b>CANOLA</b>	Cutworm spp. Armyworm spp. Diamondback Moth Flea Beetle Cabbage Seedpod Weevil Lygus Bug Grasshoppers	0.015-0.03	1.92-3.84	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply a minimum of 2 gals. of water/A. • Do not apply within 7 days of harvest • Do not apply more than 0.09 lb. a.i. (0.72 pt or 11.52 fl. oz. of product)/A per year.
	Cabbage Aphid	0.03	3.84	
<b>CEREAL GRAINS: Corn (At- Plant): Field Corn Popcorn Seed Corn Sweet Corn</b>	Corn Rootworm Larvae (Western, Northern, Southern, Mexican) Cutworm spp. Seed corn Maggot Seed corn Beetle Lesser Cornstalk Borer White Grub spp. Wireworm spp. Red Imported Fire Ant <sup>1</sup>	0.005 lb. ai per 1,000 ft. of row <sup>2</sup>	0.66 fl. oz. per 1,000 ft. of row <sup>2</sup>	Banded Applications: Apply at planting as a 5-7 inch T-band sprayed across the open seed furrow between the furrow openers and the press wheels or as a band application behind the press wheel. In-Furrow Applications: Apply into the seed furrow through spray nozzles or microtubes behind the planter furrow openers and in front of the press wheel. Apply a minimum of 3 gals. of finished spray/A. • Do not harvest or graze livestock or cut treated crops for feed within 21 days of at-plant application. • Do not apply more than 0.09 lb. a.i. (0.72 pt or 11.52 fl. oz. of product)/A per crop at-plant

				<ul style="list-style-type: none"> <li>• For field corn, popcorn, and seed corn, do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product/A per crop from at-plant and foliar applications.</li> <li>• For sweet corn, do not apply more than 0.48 lb. a.i.. (3.84 pts. or 61.44 fl. oz. of product)/A per crop from at-plant and foliar applications.</li> </ul> <p><sup>1</sup> Suppression only.</p>
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**<sup>2</sup>Lbs. a.i. and fl. oz./A of Lambda-Cyhalothrin applied at 0.66 fl. oz./1000 ft. of row for various row spacings:**

Row Spacing	40"	38"	36"	34"	32"	30"
Linear Ft./A	13,068	13,756	14,520	15,374	16,335	17,424
Lbs. a.i./A	0.067	0.07	0.075	0.079	0.084	0.09
Fl. oz./A	8.6	9.1	9.6	10.1	10.8	11.5

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>CEREAL GRAINS:</b> <b>Corn (Foliar):</b> Field Corn Popcorn Seed Corn	Cutworm spp. Western Bean Cutworm <sup>1</sup> Corn Earworm <sup>1</sup> Green Cloverworm Meadow Spittlebug	0.015-0.025	1.92-3.20	Apply as required by scouting or locally prescribed corn growth stages, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds or other locally recommended methods.
	Tobacco Budworm <sup>1,4</sup> European Corn Borer <sup>1</sup> Southwestern Corn Borer Stalk Borer <sup>1</sup> Hop Vine Borer <sup>1</sup> Armyworm <sup>2</sup> Fall Armyworm <sup>2</sup> Yellow-striped Armyworm <sup>2</sup> Webworm spp. Flea Beetle spp. Western Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Southern Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Bean Leaf Beetle Cereal Leaf Beetle Japanese Beetle (Adult)	0.02-0.03	2.56-3.84	Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of target location. When applying by air, apply in a minimum of 2 gals. of water/A. For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small corn. Direct spray to the base of corn plants. Repeat applications at 3-5 day intervals if needed. Lambda-Cy AG may only suppress heavy infestations and/or subsequent migrations. For control of adult corn rootworm beetles ( <i>Diabrotica</i> species) as part of an aerial-applied corn rootworm control program, use a minimum of 3.84 fl. oz/A (0.03 lb. a.i./A). <ul style="list-style-type: none"> <li>• Do not apply within 21 days of harvest.</li> <li>• Do not allow livestock to graze in treated areas or harvest treat corn forage as feed for meat or dairy animals within 1 day after last treatment. Do not feed treated corn fodder or silage to</li> </ul>

	Sap Beetle (Adult) Stink Bug spp. Grasshopper spp. Corn Leaf Aphid <sup>3</sup> Bird Cherry-Oat Aphid <sup>3</sup> English Grain Aphid <sup>3</sup>			meat or dairy animals within 21 days after last treatment. <ul style="list-style-type: none"> <li>Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per crop from at-plant and foliar applications.</li> </ul>
	Beet Armyworm <sup>2, 4</sup> Chinch Bug Green Bug <sup>3,4</sup> Southern Corn Leaf Beetle Mexican Rice Borer <sup>1</sup> Rice Stalk Borer <sup>1</sup> Sugarcane Borer <sup>1</sup>	0.03	3.84	<ul style="list-style-type: none"> <li>Do not apply more than 0.06 lb. a.i. (0.48 pt. or 7.68 fl. oz. of product) after silk initiation.</li> <li>Do not apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. oz. of product) after corn has reached the milk stage (yellow kernels with milky fluid).</li> </ul> <p><sup>1</sup>For control before the larva bores into the plant stalk or ear.  <sup>2</sup> Use higher rates for large larvae.  <sup>3</sup>Suppression only.  <sup>4</sup>See resistance statement under PRODUCT INFORMATION.</p>

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>CEREAL GRAINS:</b> <b>Corn (Foliar):</b> Sweet Corn	Corn Earworm Fall Armyworm <sup>1</sup> Southern Armyworm <sup>1</sup> Beet Armyworm <sup>1,3</sup> Yellow-Striped Armyworm <sup>1</sup> Cutworm spp. Western Bean Cutworm Webworm spp. European Corn Borer Southwestern Corn Borer Common Cornstalk Borer Western Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Southern Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Japanese Beetle (Adult) Sap Beetle (Adult)	0.02-0.03	2.56-3.84	Apply as required by scouting, or locally prescribed corn growth stages, usually at intervals of 4 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds or other locally recommended methods and should be targeted for control before insects enter the stalk or ear. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage and ears (if present). When applying by air, apply in a minimum of 2 gals. of water/A. For control of adult corn rootworm beetles ( <i>Diabrotica</i> species) as part of an aerial applied corn rootworm control program, use a minimum of 3.2 fl. oz. of product/A (0.025 lb. a.i./A). <ul style="list-style-type: none"> <li>Do not apply within 1 day of harvest.</li> <li>Do not allow livestock to graze in treated areas or harvest treated corn forage as feed for meat or dairy animals within 1 day after last treatment.</li> <li>Do not feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment.</li> <li>Do not apply more than 0.48 lb. a.i.</li> </ul>

	Flea Beetle spp. Tarnished Plant Bug Stink Bug spp. Chinch Bug Aster Leafhopper Grasshopper spp. Aphid spp. <sup>2,3</sup> Spider Mite spp. <sup>2</sup>			(3.84 pts. or 61.44 fl. oz. of product)/A per season. <sup>1</sup> Use higher rates for large larvae. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under PRODUCT INFORMATION.
	Corn Silkfly (Adult) <sup>2</sup>	0.03	3.84	

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Rice Wild Rice	True Armyworm Fall Armyworm Yellow-striped Armyworm Rice Water Weevil (Adult) Rice Stink Bug Chinch Bug Grasshopper spp. Leafhopper spp. Bird Cherry-Oat Aphid Greenbug Sharpshooter spp. Yellow Sugarcane Aphid Riceworm	0.025-0.04	3.20-5.12	See additional instructions below. • Do not release floodwater within 7 days of an application. • Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season. • Do not apply more than 0.04 lb. a.i. (0.32 pt.)/A within 21 to 27 days of harvest. • Do not apply within 21 days of harvest. • Do not use treated rice fields for the aquaculture of edible fish and crustacea. • Do not apply as an ultra-low volume (ULV) spray. <sup>1</sup> For control before the larvae bores into the plant stalk.
	European Corn Borer <sup>1</sup> Mexican Rice Borer <sup>1</sup> Rice Seed Midge <sup>1</sup> Rice Stalk Borer <sup>1</sup> Sugarcane Borer <sup>1</sup>	0.03-0.04	3.84-5.12	

**REMARKS:**

- Mixers/loaders supporting aerial applications to wild rice at a rate of 0.04 lb. a.i. per acre, and treating 1200 acres (or more) per day must wear dust-mist respirator.
- Apply as required by scouting. Timing and frequency of application should be based upon insect populations reaching locally determined economic thresholds. Determine the need for repeat applications, usually at intervals of 5- 7 days, by scouting.
- Lambda-Cy AG can be safely used when propanil products are being used for weed control.
- Apply by air or by ground equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water (or a total carrier volume)/A but ensure sufficient volume is used to provide adequate coverage. In addition, adding an emulsifiable crop oil (e.g., 1 pt./A) when lower aerial application volumes are used is recommended to help improve coverage, reduce evaporation, and improve efficacy. Apply a minimum of 10 gallons/A by ground.
- For control of rice water weevil in dry seeded rice, make a foliar application as indicated by scouting for the presence of adults and/or feeding scars, usually within a time frame of 0-5 days after permanent flood establishment. Do not exceed 10 days from starting permanent flood until insecticide application unless scouting indicates weevils have not been previously present. Adults may also be treated at later stages of rice development to reduce overwintering populations.
- For control of rice water weevil in water seeded rice, make the first foliar application after pinpoint flood as indicated by scouting for the presence of adults and/or feeding scars usually when rice has emerged 0.5 inch above the waterline. Under conditions of prolonged migration into the field, start field scouting for rice water weevil adults and/or feeding scars 3-5 days after the initial treatment and, if needed, apply a second application within 7-10 days of the first application. Adults may also be treated at later stages of

rice development to reduce overwintering populations.

- California: In addition to above directions for control of rice water weevil in water seeded rice, Lambda-Cy AG may be applied at the 1- to 3-leaf growth stage with the majority at the 2- leaf growth stage. Adults are vulnerable on levees and in the water. Larvae are vulnerable while feeding on the leaf prior to entering the soil. Monitor for adults, based upon field history and density of population. Monitor field edges and levee areas for adults. Treat in the following manner: (a) spray the inside perimeter of the field, or (b) spray the entire field.
- Greenbug is known to have many biotypes. Lambda-Cy AG may only provide suppression. If satisfactory control is not achieved with the first application of Lambda-Cy AG, a resistant biotype may be present. Use alternate chemistry for control.
- For control of stem borers, scout fields when rice growth is near panicle differentiation, for early symptoms of damaging populations exhibited as discoloration (orange-tan) around the junction of the leaf sheath and leaf blade which is caused by feeding of young larvae within the sheath. Applications must be made before larvae bore into rice stems. Make the first application at panicle differentiation to 2 inch panicle for partial control. Make the second application at boot to heading for maximum control. All rice varieties are susceptible to stem borer damage, but Cocodrie and Priscilla are particularly susceptible.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Sorghum (Grain)	Cutworm spp. Sorghum Midge	0.015-0.02	1.92-2.56	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of target location. When applying by air, apply in a minimum of 2 gals. of water/A. For sorghum midge control, begin applications when 25% of the sorghum heads have emerged and are in tip bloom. Repeat applications at 5-day intervals if needed. For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small sorghum. Direct spray to the base of sorghum plants. Repeat applications at 3- to 5-day intervals if needed. Lambda-Cy AG may only suppress heavy infestations and/or subsequent migrations.
	Armyworm Beet Armyworm <sup>1,3</sup> Fall Armyworm <sup>1</sup> Yellow-striped Armyworm <sup>1</sup> Corn Earworm Webworm spp. European Corn Borer <sup>2</sup> Southwestern Corn	0.02-0.03	2.56-3.84	<ul style="list-style-type: none"> <li>• Do not apply within 30 days of harvest.</li> <li>• Do not apply more than 0.08 lb. a.i. (0.64 pt. or 10.24 fl. oz. of product)/A per season.</li> <li>• Do not apply more than 0.06 lb. a.i. (0.48 pt. or 7.68 fl. oz. of product)/A per season after crop emergence.</li> <li>• Do not apply more than 0.02 lb. a.i. (0.16 pt. or 2.56 fl. oz. of product)/A</li> </ul>

	Borer <sup>2</sup> Lesser Cornstalk Borer <sup>2</sup> Flea Beetle spp. Stink Bug spp. Grasshopper spp.			per season once crop is in soft dough stage.  <sup>1</sup> Use higher rates for large larvae only. <sup>2</sup> For control before the larva bores into the plant stalk. <sup>3</sup> See resistance statement under PRODUCT INFORMATION.
	Chinch Bug Mexican Rice Borer <sup>2</sup> Rice Stalk Borer <sup>2</sup> Sugarcane Borer <sup>2</sup>	0.03	3.84	

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>CEREAL GRAINS:</b> Barley Buckwheat Oats Rye Wheat Wheat Hay Triticale	Cutworm spp. Army Cutworm	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. For chinch bug control. repeat applications at 3- to 5-day intervals if needed. Lambda-Cy AG may only suppress heavy infestations and/or migrations. Greenbug is known to have many biotypes. Lambda-Cy AG may provide suppression only. In this situation, a second application using an alternative chemistry may be needed. <ul style="list-style-type: none"> <li>Do not apply within 30 days of harvest.</li> <li>Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after last treatment. Do not feed treated straw to meat or dairy animals within 30 days after last treatment.</li> <li>Do not apply more than 0.06 lb. a.i. (0.48 pt. or 7.68 fl. oz. of product) /A per season.</li> </ul> <sup>1</sup> Best control is obtained before insects begin to roll leaves. Once wheat has started to boot, Lambda-Cy AG may provide suppression only. Higher rates and increased coverage will be necessary. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under PRODUCT INFORMATION. <sup>4</sup> Make applications when adults emerge.
	Armyworm Fall Armyworm Yellow-striped Armyworm	0.02-0.03	2.56-3.84	
	Flea Beetle spp. Cereal Leaf Beetle Stink Bug spp. English Grain Aphid <sup>1</sup> Russian Wheat Aphid <sup>1</sup> Bird Cherry-Oat Aphid <sup>1</sup> Grasshopper spp. Orange Blossom Wheat Midge Hessian Fly <sup>4</sup>	0.025-0.03	3.20-3.84	
	Grass Sawfly	0.03	3.84	
	Chinch Bug Greenbug <sup>1,2</sup> Corn Leaf Aphid <sup>2</sup> Mite Spp. <sup>2</sup>			

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>COLE CROPS:</b> Broccoli Brussels Sprouts Cabbage Cavalo Broccolo Cauliflower Chinese Broccoli (gai lon) Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy) Kohlrabi	Alfalfa Looper Cabbage Looper Imported Cabbageworm Southern Cabbageworm Cutworm spp. Cabbage Webworm	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. • Do not apply within 1 day of harvest. • Do not apply more than 0.24 lb. a.i. (1.92 pts. or 30.72 fl. oz. of product)/A per season. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under PRODUCT INFORMATION.
	Diamondback Moth <sup>3</sup> Armyworm Beet Armyworm <sup>1,3</sup> Fall Armyworm <sup>1</sup> Yellow-striped Armyworm Corn Earworm Flea Beetle spp. Japanese Beetle (Adult) Vegetable Weevil (Adult) Grasshopper spp. Leafhopper spp. Plant Bug spp. including Lygus spp. <sup>3</sup> Stink Bug spp. Meadow Spittlebug Aphid spp. <sup>2,3</sup> Whitefly spp. <sup>2,3</sup> Thrips spp. <sup>2</sup> Spider Mite spp. <sup>2</sup>	0.02-0.03	2.56-3.84	

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
COTTON	Cutworm spp. Tobacco Thrips Soybean Thrips	0.015-0.02	1.92-2.56	<p>Apply as required by scouting, usually at intervals of 5-7 days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.</p> <p>Apply with ground or air equipment using sufficient water to obtain full coverage of foliage.</p> <p>Applications may also be made with equipment adapted and calibrated for ULV sprays. Lambda-Cy AG may be mixed with once-refined vegetable oil and applied in a minimum of at least 1 qt. of finished spray/A.</p> <p>Under light bollworm/budworm infestation levels, 0.02 lb. a.i./A may be applied in conjunction with intense field monitoring,</p> <p>For boll weevil control spray on a 3- to 5-day schedule.</p> <p>When applied according to label directions for control of cotton bollworm and tobacco budworm, Lambda-Cy AG also provides ovicidal control of unhatched <i>Heliothis</i> spp, eggs.</p> <ul style="list-style-type: none"> <li>• Do not apply within 21 days of harvest.</li> <li>• Do not graze livestock in treated areas.</li> <li>• Do not apply more than 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per season.</li> <li>• Do not make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season.</li> </ul> <p><sup>1</sup>For control of first and second instar only.  <sup>2</sup>Suppression only.  <sup>3</sup>See resistance statement under PRODUCT INFORMATION.</p>
	Lygus Bug spp. <sup>3</sup> Pink Bollworm Cabbage Looper Cotton Leafperforator Saltmarsh Caterpillar Cotton Leafworm Cotton Fleahopper	0.02-0.03	2.56-3.84	
	Cotton Bollworm Tobacco Budworm <sup>3</sup> Boll Weevil Fall Armyworm Beet Armyworm <sup>1,3</sup> European Corn Borer Brown Stink Bug Green Stink Bug Southern Green Stink Bug Two-spotted Spider Mite <sup>2</sup> Cotton Aphid <sup>2,3</sup> Bandedwing Whitefly <sup>2,3</sup> Sweetpotato Whitefly <sup>2,3</sup>	0.025-0.04	3.20-5.12	

CROP	TARGET PESTS	Rate		REMARKS
		lb. a.i./A	ft. oz./A	
<b>CUCURBIT VEGETABLES CROP GROUP</b> <b>Including:</b> Chayote (fruit) Chinese Waxgourd (Chinese preserving melon) Citron Melon Cucumber Gherkin Gourd (edible) <i>Lagenaria</i> spp. – Includes: hyotan, cucuzza <i>Luffa acutangula</i> , Includes: hechima, Chinese okra <i>Momordica</i> spp. Includes: balsam apple, balsam pear, bitter melon, Chinese cucumber Muskmelon (hybrids and/or cultivars of <i>Cucumis</i> <i>melo</i> ) – Includes: true cantaloupe cantaloupe, casaba, crenshaw melon, golden pershaw melon honeydew melon, honey balls, mango melon Persian melon, pineapple melon, Santa Claus melon, snake melon Pumpkin Squash, summer ( <i>Cucurbita pepo</i> var. <i>melo</i> ) – Includes: crookneck squash straightneck squash vegetable marrow, zucchini	Armyworm spp. <sup>1</sup> Blister Beetle spp. Cabbage Looper Corn Earworm Cricket spp. Cucumber Beetle spp. (adults) Cutworm spp. Flea Beetle spp. Grasshopper spp. June Beetle spp. Leaffooted Bug Leafhopper spp. Lygus Bug spp. <sup>1</sup> Melonworm Pickleworm Plant Bug spp. Rindworm spp. complex Saltmarsh Caterpillar Squash Beetle Squash Bug spp. Squash Vine Borer spp. Stink Bug spp. Thrips spp. <sup>1,2</sup> Tobacco Budworm <sup>1</sup> Webworm spp.	0.02- 0.03	2.56- 3.84	Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area. When applied by ground, a minimum of 10 gal. Solution per acre is recommended. Air application: Apply in a minimum of 2 gals. Per acre or sufficient spray volume to obtain full coverage of the foliage or target area.  Monitoring of insect populations should be used to determine timing and frequency of applications. Scout fields at a minimum of 5 day intervals.  Apply in sufficient volume to ensure sufficient coverage of foliage.  Insects that bore or tunnel into leaves, vines, stems or fruit must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of Lambda-Cy AG
	Aphid spp. <sup>1</sup> Leafminer spp. <sup>1,3</sup> Spider Mite spp. <sup>3</sup> Whitefly spp. <sup>1,3</sup>	0.03	3.84	<ul style="list-style-type: none"> <li>• Do not apply more than 0.18 lb. a.i. (1.44 pts. or 23 fl. oz. of product)/A per season.</li> <li>• Do not apply within 1 day of harvest.</li> </ul> <p><sup>1</sup> See resistance statement under <b>Directions for Use</b>  <b>PRODUCT INFORMATION.</b></p> <p><sup>2</sup> Does not include Western Flower Thrips.</p> <p><sup>3</sup> Suppression only.</p>

<p>Squash, winter (<i>Cucurbita maxima</i>, <i>C. moschata</i>) – Includes: Butternut squash, calabaza, hubbard squash (<i>C. mixta</i>: <i>C. pepo</i>) – Includes: acorn squash, spaghetti squash Watermelon – Includes: Hybrids and/or varieties of <i>Citrullus lanatus</i></p>				
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Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>FRUITING VEGETABLES:</b> Tomato and Tomatillo Peppers (bell and non-bell) Eggplant Ground Cherry Pepino	Cabbage Looper Cutworm spp. Hornworm spp.	0.015-0.025	1.92-3.20	<p>Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.</p> <p>Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A.</p> <ul style="list-style-type: none"> <li>• Do not apply within 5 days of harvest.</li> <li>• Do not apply more than 0.36 lb. a.i. (2.88 pts. or 46.08 fl. oz. of product)/A per season.</li> </ul> <p><sup>1</sup>For control of first and second instar only. <sup>2</sup>Suppression only. <sup>3</sup>See resistance statement under PRODUCT INFORMATION. <sup>4</sup>For control before the larva bores into the plant stalk or fruit. <sup>5</sup>Does not include Western Flower Thrips.</p>
	Tomato Fruitworm Tobacco Budworm <sup>3</sup> Tomato Pinworm Beet Armyworm <sup>1,3</sup> Southern Armyworm <sup>1</sup> Yellow-striped Armyworm <sup>1</sup> Fall Armyworm <sup>1</sup> European Corn Borer <sup>4</sup> Leafminer spp. <sup>2</sup> Colorado Potato Beetle <sup>3</sup> Flea Beetle spp. Grasshopper spp. Leafhopper spp. Aphid spp. <sup>2,3</sup> Whitefly spp. <sup>2,3</sup> Meadow Spittlebug Stink Bug spp. Plant Bug spp. Stalk Borer <sup>4</sup> Blister Beetle spp. Japanese Beetle (Adult) Pepper Weevil (Adult) <sup>2</sup> Vegetable Weevil (Adult) Tomato Psyllid <sup>2,3</sup> Spider Mite spp. <sup>2</sup> Thrips <sup>5</sup> Cucumber Beetle spp. (Adult)	0.02-0.03	2.56-3.84	

CROP	TARGET PESTS	Rate		REMARKS
		lb. a.i./A	fl. oz./A	
<b>GRASS FORAGE, FODDER, AND HAY</b> Pasture and Rangeland Grass, Grass Grown for Hay or Silage, Grass Grown for Seed	Army Cutworm Cutworm spp. Essex Skipper Range Caterpillar Striped Grass Looper	0.015-0.025	1.92-3.20	<b>Ground application:</b> Apply in sufficient spray volume to obtain full coverage of the foliage or target area. <b>Air application:</b> Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage or target area. Monitoring of insect populations should be used to determine timing and frequency of applications. Scout fields at a minimum of 5 day intervals. Apply in sufficient volume to ensure sufficient coverage of foliage. Chinch bugs: Lambda-Cy AG may only suppress heavy infestations and/or migrations. In this situation, a second application using an alternative chemistry may be needed. Greenbug: Greenbug is known to have many biotypes. Lambda-Cy AG may provide suppression only. In this situation, a second application using an alternative chemistry may be needed. Pasture and rangeland grass: May be used for grazing or cut for forage 0 days after application. Do not cut grass to be dried and harvested for hay until 7 days after the last application. Grass grown for seed: Straw and mature seed (seed screenings) may be used as feed 7 days after the last application. Regrowth of grass grown for seed may be used for grazing, cut for forage or cut to be dried and harvested for hay. <sup>1</sup> Best control is obtained before insects begin to roll leaves. <sup>2</sup> See resistance statement under PRODUCT
	Beet Armyworm Billbug spp. <sup>3</sup> Bird Cherry-Oat Aphid <sup>1</sup> Black Grass Bug Black Turfgrass Beetle (Adult) Blue Stem Midge Cereal Leaf Beetle Chinch Bug Crane Fly spp. Cricket spp. English Grain Aphid <sup>1</sup> Fall Armyworm Flea Beetle spp. Grass Mealybug Grass Sawfly (Adult) Grasshopper spp. Green June Beetle (Adult) Greenbug <sup>1,2</sup> Japanese Beetle (Adult) Katydid spp. Leafhopper spp. Mite spp. Russian Wheat Aphid <sup>1</sup> Southern Armyworm Spittlebug spp. Stink Bug spp. Sugarcane Aphid Thrips spp. Tick spp. True Armyworm Webworm spp. Yellowstriped Armyworm	0.02-0.03	2.56-3.84	

				INFORMATION <sup>3</sup> Suppression only.
				<ul style="list-style-type: none"> <li>Do not apply more than 0.03 lb. a.i. (0.24 pts. or 3.84 fl. oz. of product)/A per cutting for pasture, rangeland and grasses grown for seed. A minimum re-treatment interval (RTI) of 30 days is required for pastures and rangeland receiving 0.03 lb. a.i./A which have not been cut between applications.</li> <li>Do not apply more than 0.09 lb. a.i. (0.72 pts. or 11.52 fl. oz. of product)/A per season.</li> </ul>

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>LEGUME VEGETABLES (BEANS AND PEAS):</b> <b>Edible Podded (only)</b> <i>Canavalia gladiata</i> - sword bean <i>Canavalia ensiformis</i> – jackbean <i>Glycine max</i> - Soybean (immature seed) <b>Edible Podded, Succulent Shelled or Dried Shelled</b> <i>Phaseolus</i> spp. - includes: field, kidney, lima, navy, pinto, runner, snap, tepary, and wax beans <i>Vigna</i> spp.- includes: adzuki, asparagus, moth, mung, rice, urd and yard long beans, black-eyed pea, catjang, Chinese longbean, cowpea, Crowder pea, and Southern pea <i>Pisum</i> spp. - includes: dwarf,	Cutworm spp. Green Cloverworm Imported Cabbageworm Saltmarsh Caterpillar Velvetleaf Caterpillar Mexican Bean Beetle	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. For edible podded and succulent shelled legume vegetables, do not apply within 7 days of harvest. For dried shelled legume vegetables, do not apply within 21 days of harvest. <ul style="list-style-type: none"> <li>Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season.</li> <li>For succulent and dried shelled peas and beans, do not graze livestock in treated areas or harvest vines for forage or hay.</li> </ul> <sup>1</sup> For control before the larva bores into the plant stalk or pods. <sup>2</sup> Use higher rates for large larvae. <sup>3</sup> For suppression only. <sup>4</sup> See resistance statement under PRODUCT INFORMATION.

<p>edible-pod, English, field, garden, green, snow and sugar snap peas <i>Cajanus cajan</i> - Pigeon pea <b>Succulent</b> <b>Shelled or Dried</b> <b>Shelled</b> <i>Vicia faba</i>.- broadbean (favabean) <b>Dried Shelled</b> <b>(only)</b> <i>Lupinus</i> spp. - includes: grain, sweet, white and sweet white lupines <i>Cicer arietinum</i> - Chickpea (garbanzo bean) <i>Cyamopsis</i> <i>tetragonoloba</i> - guar <i>Lablab purpureus</i> - Lablab bean (hyacinth bean) <i>Lens esculata</i> - Lentils</p>	<p>Corn Earworm Painted Lady Butterfly (larva) European Corn Borer Looper spp. Western Bean Cutworm Tobacco Budworm<sup>4</sup> Armyworm<sup>2</sup> Fall Armyworm<sup>2</sup> Yellow-striped Armyworm<sup>2</sup> Western Yellow- striped Armyworm<sup>2</sup> Bean Leaf skeletizer Webworm spp. Leaf-tier spp. Alfalfa Caterpillar Stalk Borer<sup>1</sup> Cucumber Beetle spp. (Adult) Corn Rootworm Beetle spp. (Adult) Flea Beetle spp. (Adult) Curculio and Weevil spp.<sup>1</sup> (foliage and pod feeding adults and larvae) Blister Beetle spp. Bean Leaf Beetle Japanese Beetle (Adult) Leafhopper spp. Flea Hopper spp. Three-cornered Alfalfa Hopper Meadow Spittlebug Stink Bug spp. Plant Bug spp. Including Lygus spp.<sup>4</sup> Grasshopper spp. Thrips spp.<sup>4,5</sup> Aphid spp.<sup>4</sup></p>	<p>0.02-0.03</p>	<p>2.56-3.84</p>	<p><sup>5</sup>Does not include Western Flower Thrips.</p>
	<p>Beet Armyworm<sup>3,4</sup> Soybean Looper<sup>3,4</sup> Lesser Cornstalk Borer<sup>3</sup> Leafminer spp.<sup>3,4</sup> Whitefly spp.<sup>3,4</sup> Spider Mite Spp.<sup>3</sup></p>	<p>0.03</p>	<p>3.84</p>	

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>LEGUME VEGETABLES:</b> Soybean	Corn Earworm Velvetbean Caterpillar Green Cloverworm Cabbage Looper Painted Lady (Thistle) Caterpillar Saltmarsh Caterpillar Woollybear Caterpillar Cutworm spp. Bean Leaf Beetle Mexican Bean Beetle Western Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Southern Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Three-Cornered Alfalfa Hopper Potato Leafhopper Thrips spp. <sup>5</sup> Soybean Aphid <sup>4</sup>	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Do not graze or harvest treated soybean forage, straw, or hay for livestock feed. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. For control of adult corn rootworm beetles ( <i>Diabrotica</i> species) as part of an aerial applied corn rootworm control program, use a minimum of 2.56 fl. oz./A (0.02 lb. a.i./A). <ul style="list-style-type: none"> <li>• Do not apply within 30 days of harvest.</li> <li>• Do not apply more than 0.06 lb. a.i. (0.48 pt.)/A per season.</li> </ul>
	Armyworm <sup>1</sup> Fall Armyworm <sup>1</sup> Yellow-striped Armyworm <sup>1</sup> Tobacco Budworm <sup>3</sup> Webworm spp. European Corn Borer Silverspotted Skipper Japanese Beetle (Adult) Blister Beetle spp. Stink Bug spp. Plant Bug spp. Grasshopper spp.	0.025-0.03	3.20-3.84	<sup>1</sup> Use higher rates for large larvae. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under PRODUCT INFORMATION. <sup>4</sup> Use lower rates for early season applications and/or lighter populations. <sup>5</sup> Does not include Western Flower Thrips.
	Beet Armyworm <sup>2,3</sup> Soybean Looper <sup>2,3</sup> Lesser Cornstalk Borer <sup>2</sup> Spider Mite spp. <sup>2</sup>	0.03	3.84	

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>LETTUCE (HEAD AND LEAF)</b>	Alfalfa Looper Cabbage Looper Imported Cabbageworm Cutworm spp. Saltmarsh Caterpillar Green Cloverworm	0.015- 0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. <ul style="list-style-type: none"> <li>Do not apply within 1 day of harvest.</li> <li>Do not apply more than 0.3 lb. a.i. (2.4 pts. or 38.4 fl. oz. of product)/A per season.</li> </ul> <p><sup>1</sup>For control of first and second instar only. <sup>2</sup>Suppression only. <sup>3</sup>See resistance statement under PRODUCT INFORMATION.</p>
	Diamondback Moth <sup>3</sup> Armyworm Beet Armyworm <sup>1,3</sup> Fall Armyworm <sup>1</sup> Southern Armyworm Corn Earworm Tobacco Budworm <sup>3</sup> European Corn Borer Flea Beetle spp. Japanese Beetle (Adult) Vegetable Weevil (Adult) Grasshopper spp. Leafhopper spp. Plant Bug spp. including Lygus spp. <sup>3</sup> Stink Bug spp. Meadow Spittlebug Aphid spp. <sup>2,3</sup> Whitefly spp. <sup>2,3</sup> Spider Mite spp. <sup>2</sup>	0.02-0.03	2.56-3.84	
<b>ONION (BULB) AND GARLIC</b>	Cutworm spp. Seedcorn Maggot (Adult) Onion Maggot (Adult) Leafminer spp. (Adult)	0.015- 0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days, Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Use the higher label rates as thrips population increases and avoid rescue situations. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. For thrips control by aerial application, the addition of 1 % COC v/v, 1/4% NIS v/v, or a silicone adjuvant (follow manufacturer's use directions) may enhance the deposition of the spray and increase plant coverage. <ul style="list-style-type: none"> <li>Do not apply within 14 days of</li> </ul>
	Armyworm spp. <sup>1</sup> Onion Thrips <sup>3</sup> Tobacco Thrips <sup>3</sup> Western Flower Thrips <sup>2,3</sup> Flower Thrips <sup>2,3</sup> Aphid spp. <sup>2</sup> Plant Bug spp. Stink Bug spp.	0.02-0.03	2.56-3.84	

				harvest. • Do not apply more than 0.24 lb. a.i. (1.92 pts. or 30.72 fl. oz. of product)/A per season. <sup>1</sup> For control of the first and second instars only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under PRODUCT INFORMATION
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		Rate		
Crop	Target Pests	lb. a.i./A	fl. oz./A	Remarks
PEANUT	Cutworm spp. Green Cloverworm Velvetbean Caterpillar Red-necked Peanut Worm Potato Leafhopper	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.
	Corn Earworm Fall Armyworm <sup>1</sup> Bean Leaf Beetle Southern Corn Rootworm (Adult) Vegetable Weevil Whitefringed Beetle (Adult) Stink Bug spp. Tobacco Thrips Grasshopper spp.	0.02-0.03	2.56-3.84	Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. • Do not apply within 14 days of harvest. • Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season. • Do not graze livestock in treated areas. Do not use treated vines or hay for animal feed.
	Beet Armyworm <sup>2,3</sup> Soybean Looper <sup>2,3</sup> Lesser Cornstalk Borer <sup>2</sup> Spider Mite spp. <sup>2</sup> Aphid spp. <sup>2</sup>	0.03	3.84	<sup>1</sup> Use higher rates for large larvae. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under PRODUCT INFORMATION.
POME FRUITS: Apple Crabapple Loquat Mayhaw Oriental Pear Pear Pear Quince	Leafroller spp. Codling Moth Tufted Apple Budworm Oriental Fruit Moth Lesser Appleworm Green Fruitworm Tent Caterpillar spp. Tentiform Leaf Miner spp. Apple Maggot (Adult) Cherry Fruit Fly spp. (Adult) Pear Sawfly Plum Curculio Japanese Beetle Plant Bug spp. Stink Bug spp. Leafhopper spp. Periodical Cicada Apple Aphid	0.02-0.04	2.56-5.12	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gals. of water/A but use higher volumes as appropriate for thorough coverage. • Do not apply within 21 days of harvest. • Do not apply more than 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year. • Do not apply more than 0.16 lb. a.i.

	Rosy Apple Aphid Pear Psylla <sup>1</sup> San Jose Scale (fruit infestations only) Orange Tortrix Omnivorous Leafroller Spirea Aphid <sup>1</sup> Tree Borer spp. Webworm spp.			(1.28 pts. or 20.48 fl. oz. of product)/A per year post bloom.  <sup>1</sup> Suppression only.
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		Rate		
Crop	Target Pests	lb. a.i./A	fl. oz./A	Remarks
<b>STONE FRUITS:</b> Apricot Sweet and Tart Cherry Nectarine Peach Plum Chickasaw Plum Damson Plum Japanese Plum Plumcot Prune	Leafroller spp. Peach Twig Borer Oriental Fruit Moth Peachtree Borer spp. Green Fruitworm Tent Caterpillar spp. American Plum Borer Cherry Fruit Fly spp. (Adult) Plum Curculio Rose Chafer Japanese Beetle Plant Bug spp. Stink Bug spp. Leafhopper spp. Periodical Cicada Black Cherry Aphid Apple Maggot (Adult) Codling Moth June Beetle Pear Sawfly Thrips spp.	0.02-0.04	2.56-5.12	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds and IPM. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gals. of water/A, but use higher volumes as appropriate for thorough coverage. <ul style="list-style-type: none"> <li>Do not apply within 14 days of harvest.</li> <li>Do not apply more than 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year.</li> <li>Do not apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per year post bloom.</li> </ul>

<b>SUGARCANE</b>	Sugarcane Borer <sup>1</sup> Rice Stalk Borer <sup>1</sup> Sugarcane Beetle (Adult) <sup>2</sup> Yellow Sugarcane Aphid <sup>3</sup> Mexican Rice Borer <sup>1</sup> Pygmy Mole Cricket Sugarcane Aphid <sup>3</sup> West Indian Cranefly	0.025-0.04	3.20-5.12	Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply a minimum of 2 gals. of water/A. <ul style="list-style-type: none"> <li>• Do not apply within 21 days of harvest.</li> <li>• Do not apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per season.</li> </ul> <sup>1</sup> For control before the larva bores into the plant stalk. <sup>2</sup> Suppression only of beetles active above ground. <sup>3</sup> See resistance statement under PRODUCT INFORMATION.
		<b>Rate</b>		
<b>Crop</b>	<b>Target Pests</b>	<b>lb. a.i./A</b>	<b>fl. oz./A</b>	<b>Remarks</b>
<b>SUNFLOWER</b>	Sunflower Beetle Cutworm spp.	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of sunflower heads and/or foliage. When applying by air, apply in a minimum of 2 gals. of water/A. <ul style="list-style-type: none"> <li>• Do not apply within 45 days of harvest.</li> <li>• Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season.</li> <li>• Do not apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per season after bloom initiation.</li> <li>• Do not apply as an ultra-low volume (ULV) spray.</li> </ul> <sup>1</sup> Use higher rates for large larvae. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under PRODUCT INFORMATION.
	Sunflower Moth Banded Sunflower Moth Fall Armyworm <sup>1</sup> Woollybear Caterpillar Spotted Cabbage Looper Painted Lady (Thistle) Caterpillar Seed Weevil (Adult) Stem Weevil (Adult) Head-Clipper Weevil (Adult) Japanese Beetle (Adult) Sunflower Maggot (Adult) Leafhopper spp. Meadow Spittlebug Stink Bug spp. Grasshopper spp.	0.02-0.03	2.56-3.84	
	Beet Armyworm <sup>2,3</sup> Spider Mite spp. <sup>2</sup>	0.03	3.84	

<b>TOBACCO</b>	Tobacco Budworm <sup>2</sup> Tobacco Hornworm Cabbage Looper Corn Earworm Salt Marsh Caterpillar Armyworm spp. <sup>1</sup> Cutworm spp. Webworm spp. Tobacco Flea Beetle (Adult) Cucumber Beetle spp. (Adult) Blister Beetle spp. Vegetable Weevil (Adult) Japanese Beetle (Adult) Grasshopper spp. Tree Cricket spp. Katydid spp. Plant Bug spp. <sup>3</sup> Stinkbug spp. Tobacco Thrips spp. <sup>2</sup> Tobacco Aphid spp. <sup>2,3</sup> Tobacco Hornworm Potato Tuberworm	0.015-0.03	1.92-3.84	<p>Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage. When applying by air, apply in a minimum of 2 gals. of water/A</p> <ul style="list-style-type: none"> <li>• Do not apply within 40 days of harvest.</li> <li>• Do not apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per year.</li> </ul> <p><sup>1</sup>For control of first and second instar only.  <sup>2</sup>Suppression only.  <sup>3</sup>See resistance statement under PRODUCT INFORMATION.</p>
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Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>TREE NUTS:</b> Almond Beech Nut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (Hazelnut) Hickory Nut Macadamia Nut (Bush Nut) Pistachio Walnut, Black Walnut, English (Persian)	Leafroller spp. Navel Orangeworm Codling Moth Filbertworm Peach Twig Borer Walnut Husk Fly spp. (Adult) Ants Plant Bug spp. Stink Bug spp. Chinch Bug Leaffooted Bug Walnut Aphid	0.02-0.04	2.56-5.12	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gals. of water/A, but use higher rates as appropriate for thorough coverage. <ul style="list-style-type: none"> <li>Do not apply within 14 days of harvest.</li> <li>Do not apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per year.</li> <li>Do not apply more than 0.12lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per year post bloom.</li> </ul>
Pecan	Hickory Shuckworm Pecan Casebearer spp. Pecan Weevil Pecan Aphid spp. Pecan Spittlebug Pecan Phylloxera spp. Stink Bug spp.	0.02-0.04	2.56-5.12	

CROP	TARGET PESTS	Rate		REMARKS
		lb. a.i./A	fl. oz./A	
<b>TUBEROUS AND CORM VEGETABLES CROP GROUP Including:</b> Arracacha Arrowroot Artichoke (Chinese and Jerusalem only) Canna (edible) Cassava (bitter and sweet) Chayote (root) Chufa Dasheen Ginger Leren Potato Sweet Potato Tanier Turmeric	Cutworm spp. Leafhopper spp. Saltmarsh Caterpillar Sweet Potato Hornworm Woollybear Caterpillar spp.	0.015-0.025	1.92-3.20	<b>Ground application:</b> Apply in sufficient spray volume to obtain full coverage of the foliage or target area.  <b>Air application:</b> Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.  Insects that bore or tunnel into leaves, vines, stems, tubers, or corms must be
	Aphid species <sup>1</sup> Armyworm spp. <sup>1</sup> Blister Beetle spp. Colorado Potato Beetle <sup>1</sup> Corn Earworm Cricket spp. Cucumber Beetle spp. (Adults) European Corn Borer Flea Beetle spp. (adults) Grasshopper spp.	0.02-0.03	2.56-3.84	

Yam (bean and true)	Looper spp. <sup>1</sup> Lygus Bug spp. <sup>1</sup> Plant Bug spp. Potato Psyllid Potato Tuberworm Stink Bug spp. Sweet Potato Leaf Beetle (Adults) Sweet Potato Vine Borer Thrips spp. <sup>1,2</sup> Tortoise Beetle spp. Webworm spp. Weevil spp. (Adults)			controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of Lambda-Cy AG.  • Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season. • Do not apply within 7 days of harvest.
	Leafminer spp. <sup>1,3</sup> Whitefly spp. <sup>1,3</sup> Spider Mite spp. <sup>3</sup>	0.03	3.84	<sup>1</sup> See resistance statement under PRODUCT INFORMATION <sup>2</sup> Does not include Western Flower Thrips. <sup>3</sup> Suppression only.

**NON-AGRICULTURAL USES**

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
<b>CONIFER AND DECIDUOUS TREES:</b> Plantations Nurseries	Pine Tip Moth spp. Spruce Budworm Bagworm Tent Caterpillar spp. Leafroller spp. Gypsy Moth Webworm spp. Tussock Moth spp. Pine Sawfly spp. Sawfly spp. Pine Chafer Japanese Beetle May Beetle spp. June Beetle spp. Pine Colaspis Beetle Leaf Beetle spp. Pales Weevil Pine Weevil spp. Pine Conelet Bug Spittlebug spp. Pine Leaf Chermid Balsam Woolly Aphid Balsam Twig Aphid Birch Leafminer Black Pine Weevil Elm Leaf Beetle European Elm Bark Beetle Mealybug spp. <sup>1</sup> Pine Needle Scale Pine Tortoise Scale Poplar Aphid spp.	0.02-0.04	2.56-5.12	To control exposed foliage, flower, cone, seed, and bark feeding insects, apply as required by scouting. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground equipment using sufficient water to obtain full coverage of target site. When applying by air, apply a minimum of 2 gals. of water/A. • Do not apply more than 0.24 lb. a.i. (1.92 pts. or 30.72 fl. oz. of product)/A per year.  <sup>1</sup> Suppression only.

<b>CONIFER AND DECIDUOUS TREES:</b> Seed Orchards	Coneworm spp. Seed Bug spp. Thrips spp.	See Remarks	See Remarks	For high volume sprayers, dilute 5.12 fl. oz. per 100 gals. of water and apply 5-10 gals. of finished spray per tree. For low volume sprayers, dilute 20 fl. oz. per 100 gals. of water and apply 100 gals. of finished spray per/A. For aerial applications, apply 15 fl. oz./A in a minimum of 10 gals. finished spray/A. <ul style="list-style-type: none"> <li>Do not apply more than 0.5 lb. a.i. (4 pts. or 64 fl. oz. of product)/A per year.</li> </ul>
<b>NON-CROPLAND (Excluding Public Land)</b>	See Crop Outlets on this label for target pest and rates.	See Crop Outlets	See Crop Outlets	Spray non-cropland adjacent to agricultural areas to control migratory insects, which may threaten crops. Follow use directions, rates, and spray recommendations found elsewhere in this label for the adjacent crop outlet and target pests. Use highest labeled rates for dense/large foliage, high insect populations, and larger larval stages. Repeat as necessary to maintain control. <ul style="list-style-type: none"> <li>Do not exceed 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year.</li> <li>Do not graze livestock in treated areas.</li> </ul>

**Rate Conversion Chart**

Lb. A.I. Per Acre	Fl. Oz. Per Acre	Pints Per Acre	Treated Acres Per Gallon
0.015	1.92	0.12	66
0.02	2.56	0.16	50
0.025	3.20	0.20	40
0.03	3.84	0.24	33
0.04	5.12	0.32	25

## **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

**Pesticide Disposal:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Handling: Nonrefillable Container** – Do not reuse or refill container. Triple rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Triple rinse as follows:

**Containers 5 gallons or less:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Once cleaned, offer for recycling or reconditioning if appropriate.

**Containers larger than 5 gallons:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over onto its other end and tip back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Refillable Containers:** Return container to point of purchase for reuse with seal intact and in salable condition. Refill this container with lambda-cyhalothrin only. Do not reuse this container for any other purpose. Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container. Cleaning this container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC 1-800-424-9300

## **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of DIRECT AG SOURCE, LLC, Inc. or Seller. To the extent consistent with applicable law all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold DIRECT AG

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